has established a broad definition of what constitutes hazardous wastes and includes a list of more than 900 chemicals, which is much broader than any state or federal EPA regulation. It has also identified 8000 generators of hazardous materials and closely regulates the activities of those generators through permits. In addition to land use and zoning controls, the county has been successful in incorporating other tools such as recharge area management, growth management, monitoring, and conventional pollution control techniques. The county was also a pioneer in developing comprehensive and strict underground storage tank control regulations. These regulations are setting the pace for many other state regulations on underground storage tanks.

KANSAS

Overview of Ground Water Resources

Kansas relies on ground water resources for municipal, rural, industrial, and irrigation water supplies. The climate ranges from humid areas in the east to semiarid areas in the west. Annually, Kansas exports about 10 million acre-feet of surface water in addition to having about 400 million acre-feet of ground water in storage.

Ground water supplies about 5.6 billion gallons per day or 85 percent of the water used in Kansas. Municipal and rural systems provide ground water to almost 1.2 million people (approximately 49 percent of the state's population). Most of the ground water withdrawn is used for irrigation (about 93 percent).

Ground water conditions differ with physiography and geology. Physiographic provinces in Kansas are the Osage Plains and Dissected Till Plains sections of the Central Lowlands province, the Ozark Plateaus province, and the Great Plains province (Fenneman, 1946). Principal aquifers in Kansas consist of two types—unconsolidated gravel, sand, silt, and clay and consolidated sandstone, limestone, and dolomite. The principal aquifers are the Alluvial aquifers, Glacial-Drift aquifer, High Plains aquifer, Great Plains aquifer, Chase and Council Grove aquifer, Douglas aquifer, and Ozark aquifer. Table 3.7 indicates these aquifer and well characteristics.

Sround Water Quality Issues

Kansas has had a long legacy of pollution from the oil and gas industry. In iddition, about half a million wells have been either drilled or abandoned md not adequately plugged, and these have the potential to cause problems